LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the claims:

1. (Cancelled)

2. (Previously Presented) A method of enhancing the function of normal, damaged, or injured central nervous system tissue in a mammal, comprising administering peripherally to a mammal in need thereof of a peripherally effective, non-toxic effective amount of recombinant erythropoietin for enhancing central nervous system tissue function, so that the associative learning or memory in/of the mammal is enhanced.

3. (Previously Presented) A method of enhancing the function of normal, damaged, or injured central nervous system tissue in a mammal, comprising administering peripherally to a mammal in need thereof a peripherally effective, non-toxic effective amount of recombinant erythropoietin for enhancing central nervous system tissue function, so that cognitive function is enhanced.

4. (Previously Presented) A method of enhancing the function of normal, or damaged, or injured excitable tissue in a mammal, comprising administering peripherally to a mammal in need thereof a peripherally effective, non-toxic effective amount of recombinant erythropoietin for enhancing excitable tissue function, wherein said excitable tissue is central nervous system tissue or peripheral nervous system tissue.

5. (Previously Presented) A method of enhancing the function of normal, damaged, or injured excitable tissue in a mammal, comprising administering peripherally to a mammal in need thereof a non-toxic effective amount of recombinant erythropoietin for enhancing excitable tissue function, wherein said administration comprises oral, topical, intraluminal or by inhalation or parenteral administration.

6. (Original) The method of Claim 5 wherein said parenteral administration is intravenous.

7. (Previously Presented) A method of enhancing the function of normal, damaged, or injured excitable tissue in a mammal, comprising administering peripherally to a mammal in need thereof a peripherally effective, non-toxic effective amount of recombinant erythropoietin for enhancing excitable tissue function, wherein said administration is acute or chronic.

8. (Cancelled)

9. (Previously Presented) A method of enhancing the function of normal, damaged, or injured excitable tissue in a mammal, comprising administering peripherally to a mammal in need thereof a peripherally effective, non-toxic effective amount of recombinant erythropoietin for enhancing excitable tissue function, wherein said EPO is administered at a dose greater than the dose necessary to maximally stimulate erythropoiesis.

10-11. (Cancelled).